

In the claims

1. (currently amended) A method of focus control, comprising:
 - passing a light source beam over a reflectivity change on a rotating optical storage media;
 - determining a change time of a reflectivity step function;
 - determining a current light source spot size using the change time and a storage media velocity; and,
 - adjusting a focus actuator to achieve a desired spot size based on the current light source spot size.
2. (cancelled)
3. (original) The method of claim 1, wherein the reflectivity step function is derived from the output of at least one photo sensor.
4. (original) The method of claim 3, wherein the change time comprises a photo sensor output rise time.
5. (original) The method of claim 3, wherein the change time comprises a photo sensor output fall time.
6. (original) The method of claim 1, wherein:
 - passing the light source beam over the reflectivity change on the storage media comprises moving the storage media with respect to the light source beam, while holding the light source beam stationary; and

the storage media velocity is the velocity of the storage media relative to the light source beam.

7. (original) The method of claim 1, wherein:

passing the light source beam over the reflectivity change on the storage media comprises moving the light source beam with respect to the storage media, while holding the storage media stationary; and

the storage media velocity is the velocity of the storage media relative to the light source beam.

8. (original) The method of claim 1, wherein:

passing the light source beam over the reflectivity change on the storage media comprises moving both the storage media and the light source beam with respect to each other; and

the storage media velocity is the velocity of the storage media relative to the light source beam.

9. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a change from a higher reflectivity to a lower reflectivity.

10. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a change from a lower reflectivity to a higher reflectivity.

11. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a bar in a label layer of the storage media.

12. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a stripe in a label layer of the storage media.
13. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a checkerboard pattern in a label layer of the storage media.
14. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a bar in a data layer of the storage media.
15. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a stripe in a data layer of the storage media.
16. (original) The method of claim 1, wherein the reflectivity change on the storage media comprises a checkerboard pattern in a data layer of the storage media.
17. (original) The method of claim 1, wherein passing the light source beam over a reflectivity change on the storage media comprises passing the light source beam from a label side of the storage media over the reflectivity change on the storage media.
18. (original) The method of claim 1, wherein the storage media is selected from the group consisting of a compact disc and a digital versatile disc.
- 19.-24. (cancelled)
25. (withdrawn) A storage media apparatus, comprising:
a focus lens;

a focus actuator coupled to the focus lens;
a light source configured to emit light through the focus lens onto a storage media;
a photo sensor configured to produce an output signal proportional to the total reflected light from the storage media; and
differentiator coupled to the photo sensor output signal.

26. (withdrawn) The storage media apparatus of claim 25, wherein the storage media is selected from the group consisting of a compact disc and a digital versatile disc.

27. (withdrawn) The storage media apparatus of claim 25, wherein the light source is further configured to emit light through the focus lens onto a label side of the storage media.

28. (withdrawn) The storage media apparatus of claim 27, wherein the storage media is permanently housed in the storage media apparatus.

29. (withdrawn) The storage media apparatus of claim 27, wherein the storage media is removeably housed in the storage media apparatus.